

Scalable high-speed prefix matching

Marcel Waldvogel, George Varghese, Jon Turner, Bernhard Plattner

November 2001 ACM Transactions on Computer Systems (TOCS), Volume 19 Issue 4

Publisher: ACM

Results 1 - 20 of 73

Full text available: pdf(933.02 KB) Additional Information: full citation, abstract, references, cited by, index terms

Result page: 1 2 3 4

next

>>

Bibliometrics: Downloads (6 Weeks): 16, Downloads (12 Months): 106, Citation Count: 5

Finding the longest matching prefix from a database of keywords is an old problem with a numb of applications, ranging from dictionary searches to advanced memory management to computational geometry. But perhaps today's most frequent best matching ...

Keywords: collision resolution, forwarding lookups, high-speed networking

² Pioneer: verifying code integrity and enforcing untampered code execution on legacy syste

Arvind Seshadri, Mark Luk, Elaine Shi, Adrian Perrig, Leendert van Doorn, Pradeep Khosla October 2005 SOSP '05: Proceedings of the twentieth ACM symposium on Operating systems principles

Publisher: ACM

Full text available: pdf(264.30 KB) Additional Information: full citation, abstract, references, cited by, index terms

Bibliometrics: Downloads (6 Weeks): 28, Downloads (12 Months): 214, Citation Count: 5

We propose a primitive, called Pioneer, as a first step towards verifiable code execution on untrusted legacy hosts. Pioneer does not require any hardware support such as secure coprocessors or CPU-architecture extensions. We implement Pioneer on an ...

Keywords: dynamic root of trust, rootkit detection, self-check-summing code, software-based code attestation, verifiable code execution

³ Pioneer: verifying code integrity and enforcing untampered code execution on legacy syste

Arvind Seshadri, Mark Luk, Elaine Shi, Adrian Perrig, Leendert van Doorn, Pradeep Khosla October 2005 ACM SI GOPS Operating Systems Review, Volume 39 Issue 5

Publisher: ACM

Full text available: pdf(264.30 KB) Additional Information: full citation, abstract, references, cited by, index terms

Bibliometrics: Downloads (6 Weeks): 28, Downloads (12 Months): 214, Citation Count: 5

We propose a primitive, called Pioneer, as a first step towards verifiable code execution on untrusted legacy hosts. Pioneer does not require any hardware support such as secure co-

processors or CPU-architecture extensions. We implement Pioneer on an ...

Keywords: dynamic root of trust, rootkit detection, self-check-summing code, software-based code attestation, verifiable code execution

4 The shunt: an FPGA-based accelerator for network intrusion prevention

🗽 Nicholas Weaver, Vern Paxson, Jose M. Gonzalez

February 2007 FPGA '07: Proceedings of the 2007 ACM/SIGDA 15th international symposium on Figure 2007 FPGA '07: Proceedings of the 2007 ACM/SIGDA 15th international symposium on Figure 2007 FPGA '07: Proceedings of the 2007 ACM/SIGDA 15th international symposium on Figure 2007 FPGA '07: Proceedings of the 2007 ACM/SIGDA 15th international symposium on Figure 2007 FPGA '07: Proceedings of the 2007 ACM/SIGDA 15th international symposium on Figure 2007 FPGA '07: Proceedings of the 2007 ACM/SIGDA 15th international symposium on Figure 2007 FPGA '07: Proceedings of the 2007 ACM/SIGDA 15th international symposium on Figure 2007 FPGA '07: Proceedings of the 2007 ACM/SIGDA 15th international symposium on Figure 2007 FPGA '07: Proceedings of the 2007 ACM/SIGDA 15th international symposium on Figure 2007 FPGA '07: Proceedings of the 2007 ACM/SIGDA 15th international symposium on Figure 2007 FPGA '07: Proceedings of the 2007 ACM/SIGDA 15th international symposium on Figure 2007 FPGA '07: Proceedings of the 2007 ACM/SIGDA 15th international symposium on Figure 2007 FPGA '07: Proceedings of the 2007 ACM/SIGDA 15th international symposium on Figure 2007 FPGA '07: Proceedings of the 2007 ACM/SIGDA 15th international symposium on Figure 2007 FPGA '07: Proceedings of the 2007 FPGA '07: Proceedi

Publisher: ACM

Full text available: pdf(240.27 KB)

Additional Information: full citation, abstract, references, index terms

Bibliometrics: Downloads (6 Weeks): 19, Downloads (12 Months): 185, Citation Count: 0

The sophistication and complexity of analysis performed by today's network intrusion preventior systems (IPSs) benefits greatly from implementation using general-purpose CPUs. Yet the performance of such CPUs increasingly lags behind that necessary to ...

Keywords: FPGA, NIC, hardware acceleration, intrusion detection

5 Implementing an untrusted operating system on trusted hardware

David Lie, Chandramohan A. Thekkath, Mark Horowitz

December 2003 ACM SIGOPS Operating Systems Review, Volume 37 Issue 5

Publisher: ACM

Full text available: pdf(280.87 KB) Additional Information: full citation, abstract, references, cited by, index terms

Bibliometrics: Downloads (6 Weeks): 26, Downloads (12 Months): 192, Citation Count: 17

Recently, there has been considerable interest in providing "trusted computing platforms" using hardware~---~TCPA and Palladium being the most publicly visible examples. In this paper we discuss our experience with building such a platform using a traditional ...

Keywords: XOM, XOMOS, untrusted operating systems

6 Implementing an untrusted operating system on trusted hardware

David Lie, Chandramohan A. Thekkath, Mark Horowitz

October 2003 SOSP '03: Proceedings of the nineteenth ACM symposium on Operating systems principles

Publisher: ACM

Full text available: pdf(280.87 KB) Additional Information: full citation, abstract, references, cited by, index terms

Bibliometrics: Downloads (6 Weeks): 26, Downloads (12 Months): 192, Citation Count: 17

Recently, there has been considerable interest in providing "trusted computing platforms" using hardware~---~TCPA and Palladium being the most publicly visible examples. In this paper we discuss our experience with building such a platform using a traditional ...

Keywords: XOM, XOMOS, untrusted operating systems

Lightweight network support for scalable end-to-end services
 Kenneth L. Calvert, James Griffioen, Su Wen

August 2002 SI GCOMM '02: Proceedings of the 2002 conference on Applications, technologies, architectures, and protocols for computer communications

Publisher: ACM

Full text available: pdf(331.84 KB) Additional Information: full citation, abstract, references, cited by, index terms

Bibliometrics: Downloads (6 Weeks): 9, Downloads (12 Months): 41, Citation Count: 13

Some end-to-end network services benefit greatly from network support in terms of utility and scalability. However, when such support is provided through service-specific mechanisms, the proliferation of one-off solutions tend to decrease the robustness ...

Keywords: end-to-end services, ephemeral state, programmable network, router achitecture

8 Lightweight network support for scalable end-to-end services

Kenneth L. Calvert, James Griffioen, Su Wen

October 2002 ACM SIGCOMM Computer Communication Review, Volume 32 Issue 4

Publisher: ACM

Full text available: pdf(331.84 KB) Additional Information: full citation, abstract, references, cited by, index terms

Bibliometrics: Downloads (6 Weeks): 9, Downloads (12 Months): 41, Citation Count: 13

Some end-to-end network services benefit greatly from network support in terms of utility and scalability. However, when such support is provided through service-specific mechanisms, the proliferation of one-off solutions tend to decrease the robustness ...

Keywords: end-to-end services, ephemeral state, programmable network, router achitecture

9 Communications of the ACM: Volume 51 Issue 1

January 2008 issue Volume 51 Issue 1

Publisher: ACM

Full text available: pdf(5.97 MB) adjusts edition Additional Information: full citation, index terms

Bibliometrics: Downloads (6 Weeks): 908, Downloads (12 Months): 2862, Citation Count: 0

10 Merging path and gshare indexing in perceptron branch prediction

David Tarjan, Kevin Skadron

September 2005 ACM Transactions on Architecture and Code Optimization (TACO), Volume 2 Issue 3

Publisher: ACM

Full text available: pdf(476.21 KB) Additional Information: full citation, abstract, references, index terms

Bibliometrics: Downloads (6 Weeks): 3, Downloads (12 Months): 69, Citation Count: 0

We introduce the *hashed* perceptron predictor, which merges the concepts behind the gshare, path-based and perceptron branch predictors. This predictor can achieve superior accuracy to a path-based and a global perceptron predictor, previously ...

Keywords: Branch prediction, neural networks, two-level predictors

11 Wireless MPLS: a new layer 2.5 micro-mobility scheme

Kaouthar Sethom, Hossam Afifi, Guy Pujolle

October 2004 MobiWac '04: Proceedings of the second international workshop on Mobility

management & wireless access protocols

Publisher: ACM

Full text available: (\$\frac{1}{100}\) pdf(480.36 KB) Additional Information: full citation, abstract, references, cited by, index terms

Bibliometrics: Downloads (6 Weeks): 24, Downloads (12 Months): 179, Citation Count: 1

In next generation wireless networks, mobile nodes will be equipped with multiple interfaces and will be able to take advantage of overlay networks. In such environment, global IP mobility solutions have to be optimized to handle micro-mobility management, ...

Keywords: 802.11, MPLS, bluetooth, handover performance, hiprman, mobility management, wireless networking

12 Relational joins on graphics processors

Bingsheng He, Ke Yang, Rui Fang, Mian Lu, Naga Govindaraju, Qiong Luo, Pedro Sander June 2008 SI GMOD '08: Proceedings of the 2008 ACM SIGMOD international conference on Management of data

Publisher: ACM

Full text available: pdf(430.82 KB) Additional Information: full citation, abstract, references, index terms

Bibliometrics: Downloads (6 Weeks): 38, Downloads (12 Months): 38, Citation Count: 0

We present a novel design and implementation of relational join algorithms for new-generation graphics processing units (GPUs). The most recent GPU features include support for writing to random memory locations, efficient inter-processor communication, ...

Keywords: graphics processors, join, parallel processing, primitive, relational database, sort

13 A simple mechanism for capturing and replaying wireless channels

Glenn Judd, Peter Steenkiste

August 2005 E-WIND '05: Proceedings of the 2005 ACM SIGCOMM workshop on Experimental approaches to wireless network design and analysis

Publisher: ACM

Full text available: pdf(6.06 MB) Additional Information: full citation, abstract, references, cited by, index terms

Bibliometrics: Downloads (6 Weeks): 73, Downloads (12 Months): 485, Citation Count: 1

Physical layer wireless network emulation has the potential to be a powerful experimental tool. important challenge in physical emulation, and traditional simulation, is to accurately model the wireless channel. In this paper we examine the possibility ...

Keywords: channel capture, emulation, wireless

14 Ethane: taking control of the enterprise

Martin Casado, Michael J. Freedman, Justin Pettit, Jianying Luo, Nick McKeown, Scott Shenker October 2007 ACM SIGCOMM Computer Communication Review, Volume 37 Issue 4

Publisher: ACM

Full text available: pdf(675.04 KB) Additional Information: full citation, abstract, references, index terms

Bibliometrics: Downloads (6 Weeks): 55, Downloads (12 Months): 290, Citation Count: 0

This paper presents Ethane, a new network architecture for the enterprise. Ethane allows managers to define a single network-wide fine-grain policy, and then enforces it directly. Ethane couples extremely simple flow-based Ethernet switches with a centralized ...

Keywords: architecture, management, network, security

15 Flicker: an execution infrastructure for tcb minimization

Jonathan M. McCune, Bryan J. Parno, Adrian Perrig, Michael K. Reiter, Hiroshi Isozaki April 2008 Eurosys '08: Proceedings of the 3rd ACM SIGOPS/EuroSys European Conference on Computer Systems 2008

Publisher: ACM

Full text available: pdf(322,80 KB) Additional Information: full citation, abstract, references, index terms

Bibliometrics: Downloads (6 Weeks): 53, Downloads (12 Months): 103, Citation Count: 0

We present Flicker, an infrastructure for executing security-sensitive code in complete isolation while trusting as few as 250 lines of additional code. Flicker can also provide meaningful, fine-

grained attestation of the code executed (as well as its ...

Keywords: late launch, secure execution, trusted computing

16 Flicker: an execution infrastructure for tcb minimization

Jonathan M. McCune, Bryan J. Parno, Adrian Perrig, Michael K. Reiter, Hiroshi Isozaki April 2008 ACM SIGOPS Operating Systems Review, Volume 42 Issue 4 Publisher: ACM

Full text available: pdf(322.80 KB) Additional Information: full citation, abstract, references, index terms

Bibliometrics: Downloads (6 Weeks): 53, Downloads (12 Months): 103, Citation Count: 0

We present Flicker, an infrastructure for executing security-sensitive code in complete isolation while trusting as few as 250 lines of additional code. Flicker can also provide meaningful, finegrained attestation of the code executed (as well as its ...

Keywords: late launch, secure execution, trusted computing

17 Ethane: taking control of the enterprise

Martin Casado, Michael J. Freedman, Justin Pettit, Jianying Luo, Nick McKeown, Scott Shenker August 2007 SI GCOMM '07: Proceedings of the 2007 conference on Applications, technologies, architectures, and protocols for computer communications

Publisher: ACM

Full text available: pdf(675.04 KB) Additional Information: full citation, abstract, references, index terms

Bibliometrics: Downloads (6 Weeks): 55, Downloads (12 Months): 290, Citation Count: 0

This paper presents Ethane, a new network architecture for the enterprise. Ethane allows managers to define a single network-wide fine-grain policy, and then enforces it directly. Ethane couples extremely simple flow-based Ethernet switches with a centralized ...

Keywords: architecture, management, network, security

18 Reconciling zero-conf with efficiency in enterprises

Chang Kim, Jennifer Rexford

December 2006 CoNEXT '06: Proceedings of the 2006 ACM CoNEXT conference

Publisher: ACM

Full text available: pdf(132.39 KB) Additional Information: full citation, abstract, references, index terms

Bibliometrics: Downloads (6 Weeks): 2, Downloads (12 Months): 2, Citation Count: 0

A conventional enterprise or campus network comprises Ethernet-based IP subnets interconnect by routers. Although each subnet runs with minimal (or zero) configuration by virtue of Etherne flat-addressing and self-learning capability, interconnecting ...

Keywords: IP, enterprise networking, ethernet, zero-configuration

19



Overshadow: a virtualization-based approach to retrofitting protection in commodity operations systems

Xiaoxin Chen, Tal Garfinkel, E. Christopher Lewis, Pratap Subrahmanyam, Carl A. Waldspurger, Dar Boneh, Jeffrey Dwoskin, Dan R.K. Ports

March 2008 ASPLOS XIII: Proceedings of the 13th international conference on Architectural supportion for programming languages and operating systems

Publisher: ACM

Full text available: pdf(272.32 KB) Additional Information: full citation, abstract, references, index terms

Bibliometrics: Downloads (6 Weeks): 89, Downloads (12 Months): 260, Citation Count: 0

Commodity operating systems entrusted with securing sensitive data are remarkably large and complex, and consequently, frequently prone to compromise. To address this limitation, we introduce a virtual-machine-based system called Overshadow that protects ...

Keywords: VMM, cloaking, hypervisors, memory protection, multi-shadowing, operating system virtual machine monitors

20 Evolving a language in and for the real world: C++ 1991-2006



Bjarne Stroustrup

June 2007 HOPL III: Proceedings of the third ACM SIGPLAN conference on History of programmin languages

Publisher: ACM

Full text available: pdf(838_10 KB)

Additional Information: <u>full citation</u>, <u>appendices and supplements</u>, <u>abstract</u>, references, index terms

Bibliometrics: Downloads (6 Weeks): 95, Downloads (12 Months): 960, Citation Count: 0

This paper outlines the history of the C++ programming language from the early days of its ISC standardization (1991), through the 1998 ISO standard, to the later stages of the C++0x revisit of that standard (2006). The emphasis is on the ideals, constraints, ...

Keywords: C++, ISO, STL, evolution, history, language use, libraries, multi-paradigm programming, programming language, standardization

Results 1 - 20 of 73 Result page: 1 2 3 4 next >>

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2008 ACM,

Terms of Usage Privacy Policy Code of Ethics Contact Us

Useful downloads: Adobe Acrobat QuickTime Windows Media Player Real Pla